



## **The traveling transect**

### **capturing island dynamics, relationships and atmospheres in the water landscapes of the Canaries**

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# ***Content***

## **Introduction**

4

## **Program**

6

## **Index of papers**

17

## **Papers**

22

## **Commitee**

516

## **Review comittee**

518

## **Venue**

522

## Index of papers

### FULL PAPERS

◦ Mapping children's experiences: Adapting context mapping tools to child participants ( <i>Mathieu Gielen</i> )	23
◦ Escaping the obvious: Skewing properties of interaction ( <i>Sus Lundgren, Dimitrios Gkouskos</i> )	32
◦ 3 contiguous experiments on a design historical case ( <i>Pia Pedersen</i> )	40
◦ Design for future uses: Pluralism, fetishism and ignorance ( <i>Cristiano Storni</i> )	50
◦ Oops! moments: Kinetic material in participatory workshops ( <i>Robb Mitchell, Agnese Caglio, Jacob Buur</i> )	60
◦ Storm system: Wearable shelter for the alpha time era ( <i>Miguel Rios</i> )	70
◦ How experimenting with networks and the data they generate can create layered semantic and visual communication design? ( <i>Miglana Minkova, Maria Martin Carrasco</i> )	80
◦ Non-directive experience design ( <i>Morten Winther</i> )	90
◦ Method-making as a method of designing ( <i>Jung-Joo Lee</i> )	100
◦ Discursive structures of informal critique in an HCI design studio ( <i>Colin Gray</i> )	110
◦ Enstasy: Immersive drawing as a design process ( <i>Welby Ings</i> )	119
◦ Balancing food values: Making sustainable choices in cooking practices ( <i>Annelise de Jong, Lenneke Kuijer, Thomas Rydell</i> )	127
◦ Characteristics and interferences of experiments in science, in the arts, and in design research ( <i>Dagmar Steffen</i> )	136
◦ Multimodal experiments in the design of a living archive ( <i>Laurene Vaughan, Reuben Stanton, Lukman Iwan, Jeremy Yuille, Jane Mullett, David Carlin, James Thom, Adrian Miles</i> )	144
◦ Towards a manifesto for methodological experimentation in design research ( <i>Henry Mainsah, Andrew Morrison</i> )	153
◦ Designing for self-leadership ( <i>Kirsten Bonde Sørensen</i> )	163
◦ Demonstrating color transitions of leuco dye-based thermochromic inks as a teaching approach in textile and fashion design ( <i>Marjan Kooroshnia</i> )	173

◦ Experimentation as making knowledge: Two models of research in the design studio ( <i>Michael Jasper</i> )	182
◦ The travelling transect: Capturing island dynamics, relationships and atmospheres in the water landscapes of the Canaries ( <i>Ellen Braae, Lisa Diedrich, Gini Lee</i> )	191
◦ Can design go beyond critique? (Trying to compose together in opening production) ( <i>Anna Seravalli</i> )	201
◦ Open wearables: Crafting fashion-tech ( <i>Valérie Lamontagne</i> )	211
◦ Designing sustainable futures ( <i>Sara Ilstedt, Josefin Wangel</i> )	218
◦ Sustainable infrastructure for ad hoc social interaction ( <i>Lone Malmborg, Signe L. Yndigegn</i> )	228
◦ Experiments all the way: Diagrams of dialectics between a design research program and experiments ( <i>Mette Agger Eriksen, Anne Louise Bang</i> )	238
◦ Sacred services: The potential for service design of theory relating to the sacred ( <i>Ted Matthews</i> )	248
◦ Becoming the energy aware clock: Revisiting the design process through a feminist gaze ( <i>Karin Ehrnberger, Loove Broms, Cecilia Katzeff</i> )	258
◦ The social fabric: Exploring the social value of craftsmanship for service design ( <i>Michelle Baggerman, Kristi Kuusk, Daniëlle Arets, Bas Raijmakers, Oscar Tomico</i> )	267
◦ Invisible man: Literature and the body in design practice ( <i>Tarryn Handcock</i> )	274
◦ The ingenuity of ageing: An experiment to explore the role of designers as a moral subject ( <i>Denny Ho, Yanki Lee</i> )	283
◦ Cardboard hospital: Prototyping patient-centric environments and services ( <i>Juha Kronqvist, Heini Erving, Teemu Leinonen</i> )	293
◦ Design experiments with social media and museum content in the context of the distributed museum ( <i>Dagny Stuedahl, Sarah Lowe</i> )	303
◦ Printed material and fabric ( <i>Jussi Mikkonen, Reetta Myllymäki, Sari Kivioja, Santeri Vanhakartano Helena Suonsilta</i> )	313
◦ A foray into not-quite companion species: Design experiments with urban-animals as significant others ( <i>Tau Ulv Lenskjold, Li Jönsson</i> )	322
◦ ‘Designerly’ analysis of participation structures ( <i>Jacob Buur, Marie Rosa Beuthel, Agnese Caglio</i> )	332
◦ The role of fiction in experiments within design, art and architecture ( <i>Eva Knutz, Thomas Markussen, Poul Rind Christensen</i> )	341

## EXPLORATORY PAPERS

◦ Utilizing the designer within: A healthcare case study ( <i>Alastair S. Macdonald</i> )	350
◦ Exploring reflective design: An approach to digital archives ( <i>Reuben Stanton, Laurene Vaughan, Jeremy Yuille</i> )	354
◦ An experiment with the voice to design ceramics ( <i>Flemming Tvede Hansen</i> )	358
◦ Artifice, the semiosphere, and counter-consciousness -or- a model for a counter-design and design research ( <i>Joshua Singer</i> )	362
◦ Designing social play through interpersonal touch: An annotated portfolio ( <i>Mads Hoby, Nicolas Padfield, Jonas Löwgren</i> )	366
◦ Articulating material criteria ( <i>Karen Marie Hasling</i> )	370
◦ Story of use: Analysis of film narratives to inform the design of object interactions ( <i>Silvia Grimaldi</i> )	374
◦ Postcards from a (better) future: Process as making ( <i>Danielle Wilde, Kristina Andersen</i> )	378
◦ Translations: Experiments in landscape design education ( <i>Anne Tietjen</i> )	382
◦ A differentiation of the notion of resistance, based on two ways of operationalizing textiles in architecture ( <i>Elisabeth Heimdal, Astrid Mody</i> )	386
◦ Double vision: Researching fashion design practise by use of qualitative techniques ( <i>Ulla Ræbild</i> )	390
◦ The in-between: An experimental venture into the position of the designer ( <i>Susana Cámara Leret, Bas Raijmakers</i> )	394
◦ Ageing as design culture ( <i>Ozge Subasi, Lone Malmborg</i> )	398
◦ Design experiments for sustainable eating in Finland ( <i>Young-Ae Hahn, Marja Seliger</i> )	402
◦ Discursive design basics: Mode and audience ( <i>Bruce M. Tharp, Stephanie M. Tharp</i> )	406
◦ Complicating machines: A call to infect architecture with the mechanism of ‘politics’ ( <i>Johan Liekens</i> )	410
◦ Why hypothetical? Grounding “the guess” in experimentation ( <i>Mary Anne Beecher</i> )	414
◦ Making as using: Design research that deciphers value ( <i>Tania Splawa-Neyman</i> )	418

◦ Experiential design landscapes: Design research in the wild ( <i>Michel Peeters, Carl Megens, Caroline Hummels, Aarnout Brombacher, Wijnand Ijsselsteijn</i> )	422
◦ Design argumentation in academic design education ( <i>Peter Dalsgaard, Christian Dindler, Jonas Fritsch</i> )	426
◦ Proto-p experiments: Entering a community of circus practitioners ( <i>Camilla Ryd</i> )	430
◦ Designing in the emergent city. Assemblage, acts, performance ( <i>Kristine Samson</i> )	434

## WORKSHOPS

◦ The Fat Factory: Chewing the fat ( <i>Mike Thompson, Daniëlle Arets</i> )	440
◦ Experimenting with design: Playing with data derived from unusual locations ( <i>Laurene Vaughan, Andrew Morrison, Aisling Kelliher</i> )	443
◦ Experimental sketching ( <i>Judith Marlen Dobler</i> )	446
◦ Playful design for Alzheimer's disease ( <i>Hester Anderiesen, Laura Eggermont</i> )	452
◦ Creative communities, creative assets: Exploring methods of mapping community assets ( <i>Catherine Greene, Gail Ramster, Katerina Alexiou, Theo Zamenopoulos, Giota Alevizou, Alan Outten, Cristina Gorzanelli</i> )	455
◦ Designing value and reframing challenges ( <i>Andrea Augsten, Frederike Beha</i> )	458
◦ Experimenting with design experiments ( <i>Anna Rylander, Bo Westerlund</i> )	460
◦ New ways of networking: A hands on workshop exploring the workspace:lab and its equipment ( <i>Christina Lundsgaard, Carolina Souza Da Conceição, Johanna Eriksson</i> )	463
◦ An experiment of reflection on design game qualities and controversies page ( <i>Mette Agger Eriksen, Maria Hellström Reimer, Eva Brandt, Kirsikka Vaajakallio</i> )	466
◦ Expand your design space with energy harvesting ( <i>Johan Pedersen, Vanessa Carpenter</i> )	469
◦ Ageing & ingenuity: What is your design story? ( <i>Yanki C Lee, Sara Hyltén-Cavallius, Virginia Tassinari</i> )	471
◦ Fungutopia workshop: Grow it yourself design ( <i>Laura Popplow</i> )	473
◦ Electronic sketching: Using IdemoBits as tools for synthesis in design research ( <i>Vanessa Carpenter, Mikkel Leth Olsen</i> )	476



## EXHIBITION

◦ Digital lace: Procedurally created design ( <i>Ellen Schofield</i> )	480
◦ Spherical harmonics: Experiments in 3d printed ceramic form ( <i>Jonathan Keep</i> )	482
◦ Lines & models. Embodied drawing acts ( <i>Judith Marlen Dobler</i> )	484
◦ Aesthetic experimentations on ceramic materials ( <i>Priska Falin</i> )	486
◦ Intelligent clothes for everyday fashion ( <i>Marie Olofsen</i> )	488
◦ Built drawings ( <i>Deborah Scott</i> )	490
◦ Bedtime stories: Weaving traditions into digital technologies ( <i>Kristi Kuusk, Geert Langereis, Oscar Tomico</i> )	492
◦ Thinking through drawing: Sites of exchange ( <i>Belinda Mitchell, Trish Bould</i> )	494
◦ Abort n'go. Designing for women's right to an autonomous abortion ( <i>Cristine Sundbom</i> )	496
◦ Typinglot ( <i>Atif Akin</i> )	499
◦ An architecturally bricolaged narrative of transit ( <i>Annelies Alice de Smet</i> )	501
◦ Energy babble ( <i>Tobie Kerridge, Liliana Ovale, Matthew Plummer-Fernandez, Alex Wilkie, Mike Michael, William Gaver</i> )	503
◦ Vigour: Smart textile services to support rehabilitation ( <i>Martijn Ten Bhömer, Oscar Tomico, Caroline Hummels</i> )	505
◦ Time experiments: Designing for reflection ( <i>Fanni Baudo, Liv Maria Henning</i> )	507
◦ Fungutopia ( <i>Laura Popplow, Tine Tillmann, Kyra Porada</i> )	509
◦ Light is history ( <i>Karthikeya Acharya, Jussi Mikkonen, Samir Bhowmik</i> )	511
◦ The Andro Chair, designing the unthinkable: Men's right to women's experience in gynaecology ( <i>Cristine Sundbom, Anne-Christine Hertz, Karin Ehrnberger, Emma Börjesson</i> )	513

# THE TRAVELLING TRANSECT: CAPTURING ISLAND DYNAMICS, RELATIONSHIPS AND ATMOSPHERES IN THE WATER LANDSCAPES OF THE CANARIES

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## ABSTRACT

The practice of landscape architecture is most often a cultivation of open space alongside an open-ended dialogue with the presence and complexities of the cultural and natural features of places, usually resulting in projects generating site resolution rather than pure invention *ex nihilo*. However, when working with the more unpredictable qualities of sites as in water-made landscapes, designers often lack mapping and representational tools capable of capturing and expressing ephemeral qualities - *dynamics*, *relationships* and *atmospheres*. These abstract qualities, that exist over physical site conditions, correspond to the fields of natural sciences and to spatial aesthetics. The Travelling Transect method, inspired by Alexander von Humboldt's method of transareal travelling and transversal collecting of ephemeral information from site, informs our exploratory fieldwork in the water landscapes of the Canary Islands, adopting the working title Canarysect. Seeking altered expressions of the abstract qualities of places, we test three well-known tools: the *sketch*, the *photo* and the *model* in response to the site conditions that meet us along the journey. While acknowledging these tools' familiarity in everyday practice, the Canarysect project negotiates testing and capture of the dynamic, relational and atmospheric qualities encountered along lines of transect across island lands and waters. Individual sketching, photography and modelling gestures merge into a common archipelago of thinking around the water landscapes of the Canaries. Through the medium of the Nordes 2013 exhibition, coexisting tableaux of imagery and form produce another mapping of already-known island landscapes, brought to contemporary presence through a gaze informed by the layered histories of the landscapes and peoples, sites and programs.

## INTRODUCTION: CAPTURING SITE QUALITIES

Site as entity, both object and as essential nature, is recognised by spatial designers as a paramount issue for their work, and over the last decade theorising about site has been a developing theme in design research. As researchers approaching site from a landscape architectural perspective, we identify the ways with which designers handle site qualities as a compelling area for contemporary design research. In current design practice, we observe that designers often address sites from a static and material point of view as empty play grounds to host new design inventions, overlooking much of that what exists, and especially the more ephemeral yet constitutive site properties such as relationships, dynamics, and atmospheres. This means that 21st century designers have not completely left behind the legacy of the modernistic era of the 20th century, which promoted design from scratch, complete with respective design methods to shape sites seen as *tabula rasa* – static, empty, bounded, functional units devoid of history or dynamism. Understandably, this legacy has led to a lack of appropriate design methods and work modes able to *transform* sites through taking on their mutable extant qualities rather than to design them anew according to a universal recipe. However, there is a tendency to increasingly acknowledge site specificity that is paralleled by an increased ecological awareness focusing on dynamic and relational site properties, such as flux and flow on the one hand, and on atmospheric site properties leading to an expanded understanding of aesthetics on the other.

This context motivates us to formulate the critical need to develop methods that enable designers to better capture the more intangible aspects of existing sites to

support *relational* transformation. We argue that contemporary design practitioners can expand their conceptual thinking and work modes through utilising design research to help elaborate these methods, which in turn can offer new site-specific driving forces to design practice. Our particular aim is to qualify the understanding of water landscapes as sites of relational, dynamic and atmospheric qualities in order to develop consciousness for their ephemeral and constitutive features. This understanding lays the foundation for improved landscape design and development. To achieve this objective we want to add to the landscape architectural 'toolbox' the first steps toward the development of an informed landscape analytical method that captures and represents the relational, the dynamic and the atmospheric qualities of water landscapes. As a means to focus around on-site qualities we investigate fieldwork travel as an immediate and mobile form of site exploration, complementary to the in-studio 'overlooking' site study of mediated site aspects in documents such as statistics, maps, Google searches and other diagrams. Our fieldwork method seeks to make the site an active participant to address the dynamic and changing qualities of places and their environmental contexts; a maker rather than simply bearer of meaning (Kahn 1996: 180). We explore the ways the more ephemeral relational, dynamic and atmospheric site qualities, often overlooked in current design practice, can be better captured through this method, and we set up a travelling experiment to test it. In this paper we report on the theoretical foundation that has helped us outlining the method, we explain what it consists of, how we have set up our experiment, what we have found on site during our experimental fieldwork, and how we evaluate our findings.

Taking the 18th and early 19th century traveller, writer and explorer Alexander von Humboldt as our methodological (and spiritual) guide we adopt a transareal approach, understood as exploring a particular geographical and cultural area from the perspective of another geographical and cultural area but on an equal footing and in order to generate new knowledge through relational thinking through an open-minded redefinition of local empirical studies. Our research team, composed of two Northern European and one Australian landscape academics, is armed with varying experiences and preconceptions according to our home landscapes, to explore test sites in the exotic - as in the sense of the other - Canary Islands landscapes. Our primary historical guide in this collaboration is Alexander von Humboldt, not the least because he first used the Canaries as a test site in preparation for his trips to the Americas, and we experiment with how the translation of his historic travelling fieldwork approach may be relevant to contemporary research practice. We base our experiment on a contemporary interpretation of Humboldtian science put forward by researchers of various fields around German scholar Ottmar Ette: 'Research subjects and objects are understood as

crossing individual areas of scientific inquiry. That is, they emerge from relations, circulation, and interactions beyond the local' (Kutzinski et al. 2012: 215). Our contemporary travelling fieldwork involves on-site fieldwork in a travel mode inspired by long-distance Australian road trips, travelled by car. It relies on the following method, nominated as 'transect' in previous educational programs. From existing knowledge we draw a transect line over the site for exploration, linking areas of interest so far identified to prepare the itinerary. On site, our knowledge expands with every kilometre travelled and every exploration made on a stop, and we correct or deviate from the itinerary to meet the needs of our immediate curiosity and questioning of the unfamiliar. Along the way, we adopt and test familiar tools that we assume to have the capacity to capture dynamic, relational and atmospheric site qualities: photographs, videos, sketches, models, writing and annotating, and ourselves as sensing, thinking and communicating subjects engaged in the multiple processes required by travelling - together.

In previous research, we have identified water landscapes as potent areas for investigation of sites understood as transient (Parodi 2010). We understand that the influence of water conditions on human settlements and the effects of human practices on aquatic systems over time can only be apprehended in the perspective of economic, climatic and social change. Generic solutions are particularly inappropriate to specific and dynamic water landscapes exposed to ongoing change, prompting our proposal for a new acknowledgment and representation of site particularities from which the design of water landscapes can shift from an imposition of universal solutions into a transformation of sites through apprehending their existing qualities.

## THEORY: TRANSFORMATION, TRANSAREAL, SERENDIPITY, SITE

Our theoretical background includes contemporary post-modern and post-structuralist theories formulated in the arts, in landscape architecture, in urban design and planning, relating to concepts of transformation, the transareal, serendipity, and site. Our other source of inspiration lies in the reinterpretation of the historical figure Alexander von Humboldt who regarded science as a mobile, transareal enterprise that moves across disciplinary and geographical boundaries and territories. Humboldt practiced such mobility of thought and application accordingly in his fieldwork through mapping and writing as witnessed in his journals and recent scholarly reinterpretations. Noticing the current state of segregated knowledge, which is counterproductive to capturing water landscapes as physical phenomena to be measured and experienced in as manifold and interrelated, we draw on Humboldt's scholarship to exceed these limitations and explore the potentials of a more nuanced view.

## PERCEPTIVE TRANSFORMATION

Designers have not completely left behind the legacy of the modernistic era of 20th century that promoted design from scratch while shaping sites regarded largely as *tabula rasa*. This leads us to sketch out perspectives for the redefinition of design methods as transformative approaches. Transformation is a situation when something is changed from one state to another – from ‘something’ to the new, or at least altered, ‘something else’ – a condition that recognises that neither before, nor after, is static (Braae, forthcoming). While the traditional design act is associated with originality in terms of ‘the new’, novelty in transformation is rather associated with the ability to create a dialogue for change with the existent. Such transformations depend upon site-related knowledge, ideally focused on enhancing relations between the nostalgic/place-bound and the not-nostalgic/nomadic, between the material and the immaterial, and between the past/present known and the future unknown (Kwon 2002). The design process is therefore influenced in terms of integrating and balancing the aesthetic reality found on site, gaining understanding of the broad notion of aesthetics (‘aisthesis’, Böhme 2006), and adopting an approach opposed to the traditional privileged, mediated and also distanced view.

Within transformation the existent reality becomes the main driver, and design thus becomes a hermeneutic agency privileging novelty through focus on creating new perceptions of the existing rather than an ex nihilo creation of new objects. If transformation does not necessarily imply that the future is subordinate to the present the sum of the dialogue between the existent and the intervention results in production without a predetermined relationship. Furthermore the outcome is always incomplete; it is a priori open for further design intervention due to its heterogeneous and compound character based upon a paradigm of complexity beyond one of harmony (Braae-Diedrich 2012). We see the interplay of immediate apprehension of and mediated intervention on sites as intrinsic to design understood as transformation, an approach we consider underestimated in current design research. That is why we propose to enhance immediate site apprehension through fieldwork, in order to grasp the qualities that are otherwise overlooked, namely the relational, the dynamic and the atmospheric, and to represent them as useful models to inform design practice.

## TRANSAREAL TRAVELLING

Humboldt’s scientific approach is appropriated to assist us to re-envision the current epistemology. Dating back to the turn of the 18th to the 19th century, his work operated within an environment characterised by an intense movement of globalisation through seafaring and increased trade with the colonies. We now find similar, yet arguable more ephemeral conditions of

global movement driven by the globalised economy. The changing world then required a changing worldview, and in his time Humboldt advanced two ‘epistemological revolutions’, which we recognise as similar to the threshold situation now. These approaches were not fully exploited then and have subsequently been forgotten or misinterpreted over the development of science into segmented and specialised areas in the late 19th and in the 20th century. Yet, according to contemporary researchers, they promise to deliver a highly valuable foundation for the adaptation of today’s scientific model to better counteract the unstable conditions of the 21st century. For us they deliver the base for examining a new site understanding and an appropriate site exploration method, fostering design as transformation.

Humboldt’s first epistemological revolution consisted in the rejection of pure reflection at distance (epitomised by the encyclopaedic knowledge of the French philosophers of 18th century) and posited empirical exploration on site as the new authority for reliable knowledge generation. Humboldt’s two great travels to the Americas (1799-1804) and to Central Asia (1829) adeptly depict his work mode in practice through his reliance on fieldwork, on immediate observation by (his) subject observer and eventually relating his findings through critical thought to his context in an ever evolving process of knowledge generation. This is precisely his second epistemological revolution: Humboldt posited knowledge as an open work, continuously in motion just as he practiced as a researcher, crossing boundaries between areas of study, exploring their interrelatedness and relational dynamics, and seeing science as a transareal pursuit. He was a pioneer of this approach in opposition to the established intellectual boundaries between disciplines and territories of the day, many of which have evolved into the specialised disciplines and area studies we still know today.

Humboldt’s appreciation of the open-ended and the relational has generated his particular format of writing, communicating and publishing, namely through texts that feature multiple cross-references and side stories in a meandering footnote apparatus, through book series conceived along forthcoming editions and through comprehensive publication of images produced by artists utilising his sketches and notes. This particularity has also earned him disdain, and many of his thousands of pages have been published in falsifying shortcuts and misinterpreting translations. Many researchers today content that Humboldt’s time has come again and as a scientific figure his work embodies such merit as to be rediscovered and reinterpreted from primary sources (cf. Ette 2012 and 2009, Kutzinski 2012, Gebauer 2009, Humboldt 2004/1810-13 and 2004/ 1845).

From our readings and research perspective, Humboldt’s claim seems to be more up-to-date than

ever: everything in our world is interrelated, and only a science understood as mobile can help us generate appropriate knowledge for complex contemporary landscapes. Our transect experiment includes the translation of this historical approach to our contemporary enterprise: Humboldt submits site thinking as on-site thinking, and site knowledge as open-ended evolutionary knowledge. We intend to contribute to the transareal and trans-scalar understanding of Humboldt's scientific model by our gaze framed through the lens of contemporary landscape architecture in a problem-oriented research approach seeking to capture the relational, the dynamic and the atmospheric qualities of sites.

#### INTENTIONAL SERENDIPITY

The open-mindedness of Alexander von Humboldt's approach corresponds with a design research epistemology that today is articulated by French urban researcher François Ascher in his writings about serendipity (Ascher 2009). The concept of serendipity involves circumstances that allow for finding what you have not been searching for. Ascher highlights that in a context of uncertainty the capacity of researching alone is insufficient for tackling problems without the ability to deploy the unexpected. Our complex contemporary world is increasingly more calculated and reasoned, and less traditional, therefore less reliant on well-known patterns resulting in the "hypermodern" condition. The nature of research is impacted through the necessity to produce new profitable knowledge in relationship to multiple individual and collective actions and decisions, to mobilize more reflection and knowledge for every action and decision and consequently to produce an increasing array of choice often with resulting uncertainty. Ascher invites researchers to shift from casual, unintended serendipity to conscious, intentional serendipity. With uncertainty as a starting point such an invitation entices a considerable shift in epistemology and methodology and encourages findings produced through situational interaction and exchange. (Ascher 2009: 88). Our design research consciously approaches serendipity as an important mode of discovery; through the medium of the transect the organizing function is the line/itinerary of travel and serendipity is what crosses the line/itinerary and causes us to pause and record or map whatever situation is thrown up at us on site.

#### SENSING SITE

Concentrating on the relational, the dynamic and the atmospheric components of sites overlooked in current design practice, we find a theoretical foundation for their relevance in the contemporary writings of US scholars Burns and Kahn. Occupying a central position in the definition of what a site is from a design perspective is the relational construct. Burns and Kahn argue that even if designers are only attributed a site within the strict boundaries of the area given by a client as an area of intervention, they cannot conceive their design without transgressing these boundaries and relate

to other geographical areas, and to past, present and future time frames. They 'construe and construct' site from an exchange between what they see in front of them and what they wish to have there, between ideas from outside (the physical site) and inside (disciplinary norms, personal convictions, societal ideals), and between the real as observed and the real (Burns/Kahn 2005: xv).

The relational dynamic is the key notion from which the whole body of ecological knowledge evolves, especially in respect to water landscapes. Furthermore, contemporary authors found their definition of landscape on it. American writer J.B. Jackson addresses landscape as 'no more than a collection, a system of man-made spaces on the surface of the earth (...). It is where the slow, natural processes of growth and maturity and decay are deliberately set aside and history is substituted. (...) A landscape is where we speed up or retard or divert the cosmic program and impose our own' (Jackson 1984: 156). Shaping sites is therefore a continuously performative action and we need to understand the existing dynamics of sites in order to work with them. This thought is confirmed by US landscape architect and scholar James Corner who proposes shifting our attention from the formal characteristics of landscape - its simple appearance - to its formative effects over time - how it works and what it does - to 'the *activities* of design and the *effects* of constructed landscapes in time' (Corner 1999: 4). With Corner, we can acknowledge landscape as design activity, which is the human aspect of the constructed dynamism of sites.

The atmospheric is a central notion in phenomenology, defined as the interface of sites and our immediate sensing of them. According to German philosopher Gernot Böhme, atmospheres are produced by the site, by the observer and by the interplay of both (Böhme 2006). In post-phenomenology, atmospheres are defined as quantifiable ephemeral qualities, such as moisture, temperature and sound (Hillier 2005). These theories have so far only been exploited to a limited degree in designed landscapes.

#### DATA AND METHODS FOR A WATER LANDSCAPE TRANSECT

##### ON-SITE SENSING: RELATIONSHIPS, DYNAMICS, ATMOSPHERES

In our project to practice a transareal approach to water landscapes, we seek to refine how to unpack the three previously defined aspects of relationships, dynamics and atmospheres. The relational aspects of water landscapes can be understood spatially, functionally and across scale or territory. Firstly, spatial relationships can be detected from a study of the elements of a site and how they interact – this corresponds to a conventional architectural work analysis of the morphology and syntax of spaces. Secondly the functional aspects appear

through a comparison between program and site, between intended use and the site's current state of human-nature-interaction – less common in prevalent design culture that imposes programs on sites. Thirdly, the scalar/territorial aspects can be detected through scrutiny of the site and the various realms and geographical areas it is connected to on local, regional and global scales – also less common in the design disciplines that work predominantly within their own defined scale limitations.

The dynamic qualities of water landscapes and how the use of water changes over time become apparent when studying developments in the evolving relationships of program to site, alongside the larger systems of influence such as geology and climatic progression over time. In normative practice analysing the dynamics across these different fields is new to many. The atmospheric features characterising water landscapes can be studied in phenomenological and post-phenomenological ways, including qualitative and quantitative methods: the humidity, temperature, light, noise of a site can be sensed through the body and expressed in visual, textual and modelling descriptions, as they are equally measured through scientific means involving tools such as hygrometers and thermometers.

#### ON-SITE METHOD: THE DEVIANT TRANSECT

Our on-site method has been inspired by Humboldt's explorative travelling further informed by our previous experiences of an Australian-European educative and research collaboration on water landscapes, focusing on the bodily experience of the subject landscape at extensive yet personal scale, called the Transects. They involved a short-term (2 weeks), intensive, long distance field trip (1000 km), nominally organized along a line drawn across territories exhibiting apparent or presumed water-land conflicts, investigating the various design projects encountered along the way. The Transects are inspired by Australian road trips for landscape architecture students and academics, modelled on The Big Transect, undertaken by RMIT University in 1997. Three subsequent Transects as academic student and research collaborations have been undertaken over the past three years in southern Australia (Queensland University of Technology, 2009), Northwest Europe (Karlsruhe Institute of Technology, 2010) and Scandinavia (University of Copenhagen, 2011). They engage with site and design through both experiential and intellectual approaches framed by an educational focus informed by fieldwork leading to the production of research questions. They arise from consciously serendipitous deviation from the itinerary while travelling, halting, observing something unexpected, further questioning it, identifying it as an issue (Diedrich/ Lee/ Raxworthy forthcoming).

The Canary Islands project, the Canarysect, is now conceived as the first solely research focused transect by three of the researchers who have been part of the

previous transects; Ellen Braae (University of Copenhagen), Lisa Diedrich (Swedish University of Agricultural Sciences), and Gini Lee, (University of Melbourne).

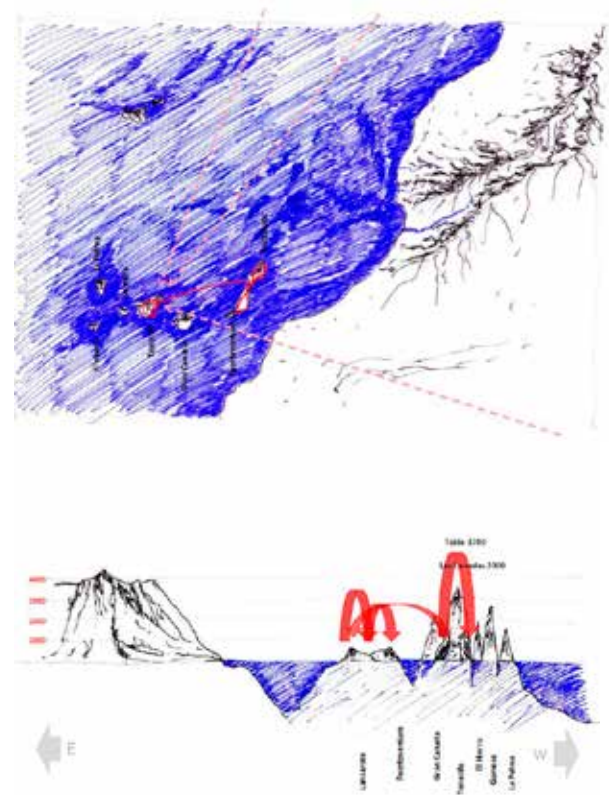


Figure 1-2: pre-travel sketches of the Canarysect itinerary

A research transect comprises three phases; pre-travel preparation based upon the experience of the host or experienced guide, on-site travelling with companions, and post-travel evaluation and communication to others. Before departure, we define our itinerary just as we did for the educational transects. We use our pre-knowledge to draw a line across the site of study along the points of landscape that promise to help us capture relationships, dynamics and atmospheres. On site, we travel along the line, always receptive for deviation, and we take with us a set of tools allowing for capturing conditions and activities. On site, we often work in an analogous way, using our tools separately and then coming together to share our observations and collections.

Photographing and filming enables us to acknowledge atmospheres through framing, in capturing a moment and making it last, for contemplating details, colours, structures, scales and capturing small sequences of a dynamic site, including sound. Sketching and hand-drawing permits open and flexible depiction of details in a semi-automatic reflection mode, it allows superimposition of various observations of forms, structures, objects and their associations brought to clarity through annotation. Conceptual modelling seeks

to capture scales, spatial properties and relationships, while abstracting landscape complexity on the one hand, and expressing materiality on the other. Our modelling kit is composed of 'as found' small materials; timber pieces of various lengths, thickness, colour, metal geometries and plexiglass elements that can be used to quickly 'build' a model on site, on an appropriate ground. On-site abstract models are photographed and the elements removed back to their kit leaving only the indents and shadows of their fleeting appearance.

Sampling techniques such as collecting materials under our feet, allow us to gather 'findings' in a very immediate way, effective for collecting small and light weight on-site materials; rocks, soil, plants but also the detritus of found crafted objects and relics. Brought together, samples allow for comparison and can detect relationships, such as between rock textures, sand colours and plant types. Plants when pressed further reveal their abstract shapes, also producing imprints on the paper of the press book, as ghosting atmospheres of plants transformed through desiccation to become the collection of site elements in miniature. Conversations with locals, designers and professionals involved in landscape development help with gathering information and insight into current discourses and practices about the dynamics and relationships of local conditions – often along the way collaborations and associations arise towards a community of practice around the site.

After the trip, the findings consist of a collection of raw material: photos and small films, sketches and annotations, model photos, earth and plant samples, interview notes. This material is sorted, evaluated, combined, interpreted, synthesised and elaborated into a communicable representation of our findings. In this phase, the tools we used on site open various options of interaction, and also of evolution into digital media.

#### TEST SITE: THE CANARYSECT

In April 2013, the particular water landscapes of the archipelago of the Canary Islands were chosen as a test site, to explore methods for transformation through transareal travel. Calling ourselves the travelling transect gels ('gels' being Australian slang for 'women') we saw these islands presenting a perfect on-site laboratory as they are commonly acknowledged as a tourist destination, providing beaches, sun and general merriment as generic qualities, indistinguishable from any other mass tourism site. We sensed that most of their particularities are overlooked as the Canaries host a maximal variety of topographical and water conditions over a compact geographical expanse, able to be explored in the context of our transect experiment. Furthermore, the Canaries are a microcosm of the globalising world, subject to economic, environmental and social change affecting the predominant Canarian economy that relies on the universal recipe of mass tourism and fossil energy.

We sought to commence at Humboldt's test site, his first extra-European halt before sailing to the Americas on the island of Tenerife, where he ascended the Teide volcano. The island represented to him an 'Inselwelt' of scientific endeavour – in German a duality of meaning – designating the island so complex that it both contains the whole world, but with the island as also part of the world that is composed of smaller and larger islands and sometimes whole continents, within the waters of the planet (Ette 2009). When Humboldt sailed from Spain to the Canaries, his team set foot on ground at La Graciosa, the small satellite island of Lanzarote in the North of the archipelago, thinking it was Tenerife. They continued to Tenerife, having a week to study the island, especially the Northern slope and the crater of the Teide Volcano. After his American travel, he elaborated on vegetation storeys on the slope of the Teide and its related microclimates, on the settlement and agriculture of the Orotava valley, on the effects of the Spanish colonisation (cf. Gebauer 2009).

The Canaries are composed of seven islands of which the easternmost, Lanzarote and Fuerteventura, are arid and the western (Gran Canaria, Tenerife, La Palma, Gomera, El Hierro) are subtropical. This is due to the high volcanoes on the western islands, which capture the clouds of trade winds and receive rain to support vegetation which can thrive as their volcanic activity has since long ceased.

On the mountainous islands, and especially on Tenerife, with the Teide as the highest peak in Spain (almost 4000 m), the local population has always lived on the cooler, wetter and more fertile Northern slopes of the volcanoes, however recent mass tourism settlements and industries have developed on the dryer, sun-exposed Southern slopes (precipitation index for the Orotava valley on the Northern slope of Tenerife 370mm/y; for Santa Cruz on the Southern slope 250mm/y). The eastern islands feature lower lands where significant vegetation cover was exacerbated by volcanic activity enduring over longer time periods, especially visible in the lava lands of Lanzarote (precipitation index 150mm/y) and the wind-eroded slopes of Fuerteventura. The small island La Graciosa, where Humboldt first went ashore, is part of this volcanic regime while featuring no fresh water resources at all. Acknowledging these water conditions, we sketched out our Canarysect itinerary to traverse the islands from wet to bone-dry, across the weather and lee sides, over six days, using a car on the islands and the airplane or ferry between the islands: Tenerife North, Tenerife from North to South across the Teide, Tenerife South, Lanzarote, and La Graciosa.

The sun-exposed Canaries have been exploited by mass tourism since the 1970s, beneficial for the local economy but a threat to the existing landscapes of the Islands through a generic mono-cultural and imported approach affecting the fabric of Canaries' ecological,



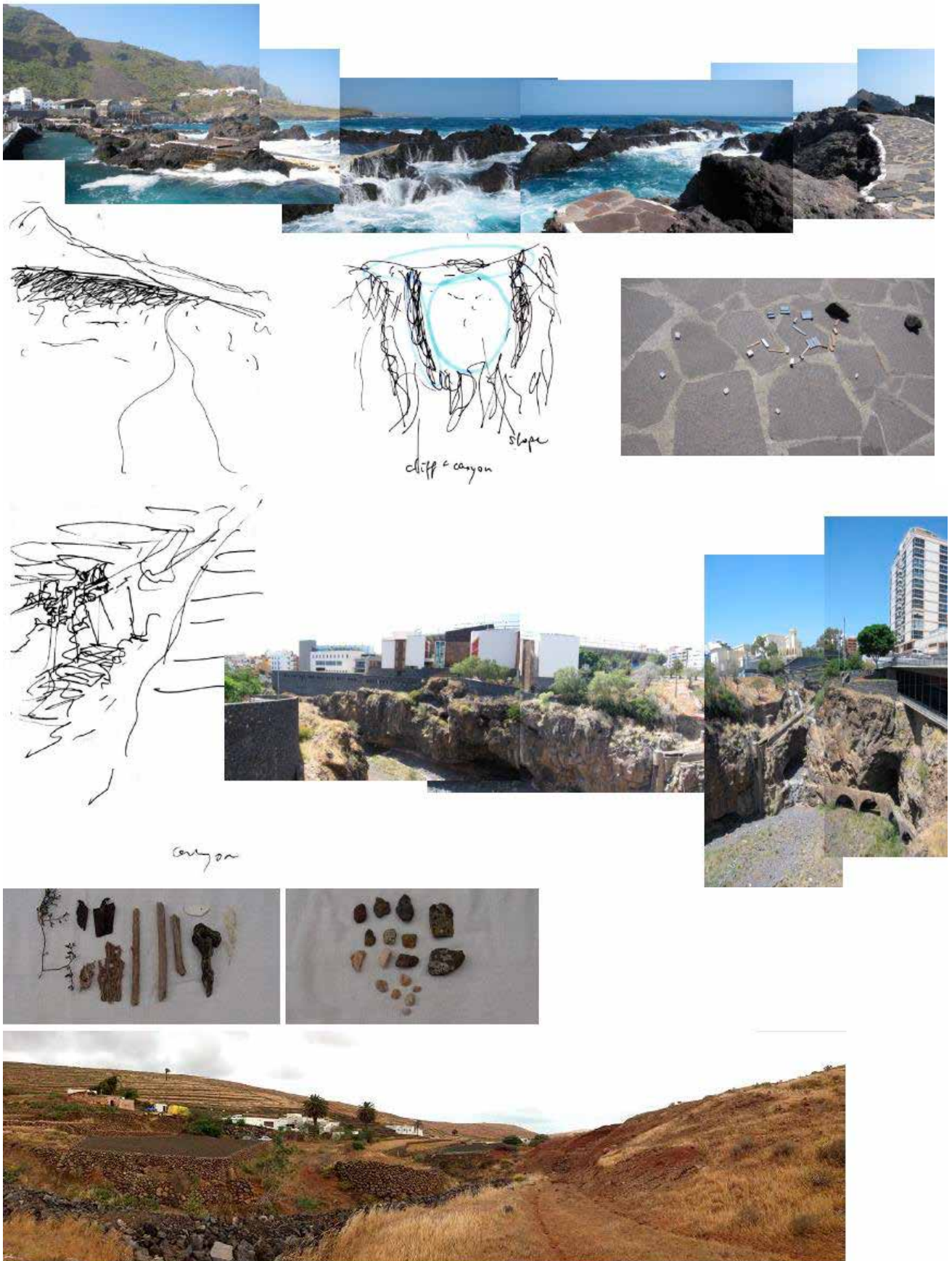


Figure 3-4: photocollage of Garachico rock pools, context sketches, model photo of Garachico coastal spaces, Tenerife; synthetic sketch of a cultivated barranco, photocollage of the urbanised Barranco de Santos in Santa Cruz de Tenerife; photos of samples from the rural barranco Los Valles, panorama photo of the Los Valles agricultural terraces, Lanzarote



social, and economical existence. Critical voices have been raised against this monoculture since the 1970s, namely in the person of Lanzarote-born artist and architect César Manrique who investigated vernacular building forms and settlements and commenced exploration of the volcanic landscape site typology, specifically in his architectural projects. He also fought for the controlled development of tourism. Since Manrique's death in 1992, Fernando Gómez Aguilera, his road companion and today director of the César Manrique Foundation, promotes local claims through his cultural institution based in Manrique's old house and from him we learnt of Manrique's great projects to preserve and exploit the unique aesthetic landscape of his island home. Also on Lanzarote, architect Caroline Bos, partner of the Dutch office UN Studio, has made her sometimes home at the end of a local valley, among tended fields and terraced hill slopes, and with her we made a journey along the local valley experiencing the age-old practices of water farming in the dry gullies.

La Graciosa introduced us to a local ethnographer in her adopted home who guided us on a transect across the island from coast to coast and from water story to small constructions and unmarked sites of interest. And on Tenerife, the local architects' chamber has initiated public activities to raise interest in local landscapes, through a Biennial for art, architecture and landscape. The director Juan Manuel Palerm, also partner of a Tenerife based architecture practice, has created the Canaries Landscape Observatory along with the Biennial, promoting research and aiming at implementing the policy of the European Landscape Convention. In our conversations with Palerm we found an enthusiastic audience for the transect idea as a revealing method for the Canaries territory alongside our exploration of his own water landscape infrastructure project for the Barranco de Santos in Santa Cruz.

## FINDINGS: MORE THAN COASTLINES, MORE THAN RAVINES

Our days of travelling transects had provided us with more than enough material - from wet to dry, from volcano to coast, across impassable rock plains to black sand beaches, from sub-tropical density to bare aridity – even thought we had originally planned to travel further.

We were particularly interested to complete our findings on cultivated ravines, discovered in a very urban typology in Tenerife and serendipitously discovering a rural form of such a ravine and its terraced agricultural landscape on Lanzarote where we invited to stay in a farmland valley. In exploring these landscape features we also came to express our different languages derived from our various home country knowledge – the ravine could also be a gully, a gorge, a canyon or a barranco in Spanish. The realisation that transect travelling requires both fast and slow travel is a temporal aspect of

landscape expression that is impossible to convey on maps far from site – this is the benefit of fieldwork.

Arising from our travel across the rocky coasts of Tenerife, Lanzarote and La Graciosa is the design research condition where landscape elements become prompts for recording and conversation. Our field notes and images reveal atmospheres of exposure and enclosure, danger and protection, the wet and fresh, the salty, the dark and the bright, dynamics of erosion in the long time frame. Our samples reveal rock textures and support the atmospheric and relationships to where the materials originate. Our films reveal water dynamics over short sequences. Our models reveal relationships of morphological elements on the architectural scale. Our sketches reveal relationships of landscape entities such as coast, ravines, cliffs and slopes at scale beyond detail.

Together, these prompts relate to: geology, topography, wind and the water regime of the Canaries, the Canaries as part of the African tectonic plateau that drifts eastwards whereas the Americas drift westwards creating volcanic activity, the volcanoes that ejected the lava that ran down the slopes forming the rocky coasts, the trade winds coming in and the northern coasts exposed to them, wind and water erosion, the closeness of the Sahara, winds in former times having deposited yellow sand at particular spots of the Canaries that now come to surface through wind erosion creating the bright land masses of La Graciosa, and finally the shallow waters between the eastern Canaries and the African coast on the African shelf thus creating the rich Canarian Saharan fishing bank and the shellfish rocks of La Graciosa.

In all the cases the coast appears to constitute both a separation line between land and water and an area of exchange – a water landscape in itself opening up for examination of the dynamic and relational interactions between site and program. By travelling in a deviated manner to literally thicken the line, we accessed an important part of the islands' water landscapes in terms of their dynamics, relations to other parts of the water landscape system, and their atmospheres as explored by visitors and fisher(wo)men.

Visiting the ravines, the lofty Barranco de Santos in Santa Cruz in Tenerife, and the gently sloping Los Valles valley in Lanzarote we were impressed by the manner of cultivation of the ravine and its terraces and infrastructures. Either for public spaces and facilities or for agriculture, and insofar as how the relationships between topography and human practices also reveal atmospheres of breath-taking spaces, tamed danger, courageous building culture (Santa Cruz), or atmospheres of paradise, the fertilised desert land, courageous earth work and terracing (Los Valles). And in our travel towards the volcanoes in the centre of the islands, our samples of geologic and botanic valley

materials support the atmospheres of the wilder desert and of the fertile and managed areas closer to the coast.

Prompts most often were found to relate to regimes of cultivation predicated on water availability and landscape management which to our gradually knowing eyes was all revealed in the patterned, constructed and piped water infrastructure embedded across the island landscapes. And it was possible to regard the migration of the forms of agricultural landscape management; the use of stone to form extensive terraces to provide enough ground to farm and to live on, and the water management tanks, aqueducts and channels into the designed landscapes of the city and its public infrastructures. These shifts in use as transareal transformations make use of the former structures, materials, and other site aspects traced directly in the genesis of the new. We sought to record these dynamic and relational characters through abstract models and drawings supplemented by photographs as a means to capture phenomena that caught our attention; elements which later appeared to play a role in the water landscape site-program of design exchange.

## DISCUSSION: THE TRAVELLING TRANSECT AS METHOD

As we transected island after island we were able to identify a pattern of approach that we seemed to repeat in each place. By means of travelling we slowly determined an idea of the regional water landscape structure, reading the ridges and valleys and at the same time studying local projects. The local projects both informed our understanding over the overall conditions, at the same time providing us with sensorial inputs. The locally situated projects opened up a direct understanding of the regional conditions and their translation into a site while at the same time they constituted a network of projects. This trans-scalar approach relating project to project and project to the overall spatial and climatic entities could only be captured by means of movement. As this understanding is gradually built up we sought to capture these relations and dynamics through making on-site models and sketches aided by structuring the photographs in a sequence of travel to record the material presence under foot in collaboration with the middle and distant landscape as contextual prompt.

Application of the various tools while transecting, in order to capture the relational, the dynamic, and the atmospheric of water landscapes, confirmed some of our research and methodological expectations and tested others. We had to distinguish between firstly the relational being spatial - the relations between objects - and second, trans-scalar - the relation between overall structures, functions and forces, site and program. In the first case the model was an excellent tool, while trans-scalar relationships could partly be represented by sketches and models. Dynamic change over time - cycles and flows - is traced on site, through the camera

and the sketch. Atmospheres as spatial, haptic and temporal conditions typically were the most difficult to record through experiments with modeling and photography, both sequential freeze frame and video capture. However, we find that much knowledge is produced 'in between' the tools or in their intersection.

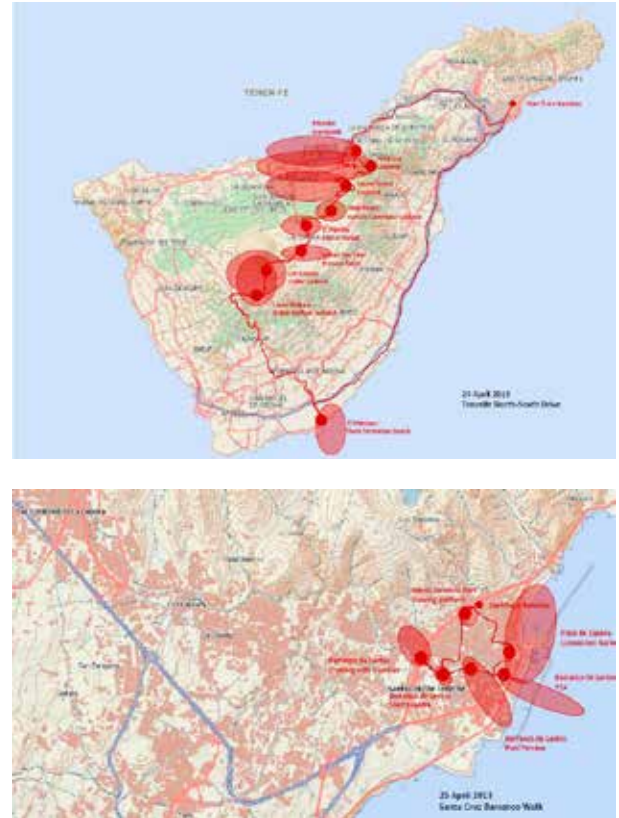


Figure 5-6: sample Canarysect itineraries, actually travelled, for the North-South transect of Tenerife, and for the urban Barranco de Santos in Santa Cruz de Tenerife

We set out with the idea of the transect knowing that pre-knowledge enabled us to define the itinerary, and that we would intentionally allow serendipity to change our itinerary on site if our attention was captured by something that deviated us. On this experimental transect research trip, it became clear that the deviation is what generates new knowledge. Future transects drawn from our fieldwork knowledge, would again be enticed to deviate, confirming our method as open-ended, producing evolutionary, never complete knowledge.

This is the source of the method defined as the deviant transect. As in Humboldt's 'tropic(al) constructions' (Ette 2012), the shift between the plan and the on-site experience enables us to discover. No shift means no discovery but only confirmation of pre-knowledge. The shift, or the trope, in Ette's words, is border crossing, leaping forward. The shift depends on the researchers' knowledge and interests, their moves, motion and emotion. It depends on WHO travels, as the knowledge generated each time and by each person will never be

the same. And if it is a team that travels, evolving from the pre-knowledge every research collaborator brings, in an iterative combination of many interpretations of experiences found while travelling towards a new common archipelago of knowing and thinking.

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